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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,227	07/11/2001	Debra M. Bell	303.752US1	9969

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EXAMINER	
NGUYEN, HAI L	

ART UNIT	PAPER NUMBER
2816	

DATE MAILED: 12/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/903,227	Applicant(s) BELL, DEBRA M.	
	Examiner Hai L. Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-84* is/are pending in the application.

4a) Of the above claim(s) *50-73* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49 and 74-84* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Election

1. Applicant's election without traverse of claims 1-49 and 74-84 in paper No.4 is acknowledged. However, this application still contains claims 50-73 drawn to an invention non-elected without traverse. Therefore, a complete reply to this Office Action must include cancellation of non-elected claims.

Claim Objections

2. Claim 77 is objected to because of the following informalities: in the last line; "first delay" should be changed to --first amount of delay--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is indefinite because the limitation "the command react circuit causes the selector to change the first amount of delay to a second amount of delay when the command signal is activated" is misdescriptive. Fig.1 clearly shows that the selector (130) to select either a first delayed signal or a second first delayed signal (DLLCK0), (DLLCK1), as an output signal

(DLLCLK), but rather than change the first amount of delay to a second amount of delay as recited in the claim. Furthermore, claim 7 is indefinite because of a similar problem.

Claims 8-12 are rejected due to their dependencies on claim 6.

Claims 13 and 22 are indefinite because the limitation "the command react circuit causes the selector to decrease the amount of delay by a delay quantity when the command signal is activated" is misdescriptive. Fig.1 clearly shows that the command react circuit (140) causes the selector (130) to select either a first delayed signal or a second first delayed signal (DLLCK0), (DLLCK1), as an output signal (DLLCLK), but rather than causing the selector to decrease the amount of delay by a delay quantity when the command signal is activated as recited in the claim. Furthermore, claims 14 and 23 are indefinite because of similar problems.

Claims 15-21 and 24-29 are rejected due to their dependencies on the bases claims 13 and 22.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-19, 21-27, 29-38, 40-47, 74, and 76-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimichi (US 5,287,025).

With regard to claims 41 and 74, Nishimichi discloses in Fig.8 a delay locked loop (DLL), and a method of use thereof, comprising a plurality of delay stages (10's) for applying an

amount of delay to an external clock signal (32) to generate a first (35a) and a second delayed signal (34a-34h); a selector (40) connected to the delay stages for selecting the first delayed signal to be an internal clock signal, wherein the external and internal clock signals are synchronized; a command react circuit (50) connected to the selector, the command react circuit including a first input for receiving a command signal (52) and a second input for receiving a phase detect signal (56), wherein the command react circuit causes the selector to replace the first delayed signal with the second delayed signal as the internal clock signal when the command signal is activated, wherein the command react circuit causes the selector to replace the second delayed signal with the first delayed signal as the internal clock signal when the phase detect signal is activated and the command signal is not activated; a phase detector (120) for comparing the external and internal clock signals to produce shifting signals; and a controller (58) connected to the delay stages for adjusting the amount of delays based on the shifting signals when the external and internal clock signals are not synchronized.

With regard to claims 42-47, Nishimichi also meets the claimed limitations in these claims.

Claims 1-7, 9-14, 16-19, 21-23, 25-27, 29-38, 40, and 76-84 are similarly rejected. Note the above discussion with regard to claims 41-47.

With regard to claims 8, 15, and 24, Nishimichi also meets the claimed limitations in these claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 20, 28, 39, 48, 49, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimichi.

With regard to claim 48, the above discussed circuit of Nishimichi meets all of the claimed limitations except for the limitation that the command react circuit (140 in instant Fig. 1) further comprising a third input for receiving a phase lock signal (PHLOCK), the phase lock signal being activated when the external and internal clock signals are synchronized. However, it would have been obvious to one of ordinary skill in the art to implement circuitry to generate a phase lock signal, as recited in claim 48, which is in each case optimally matched to its application. For example, implemented circuitry having the phase lock signal for activating a subsequent circuitry in the command react circuit when the external and internal clock signals are synchronized.

Claims 49 and 75 are rejected for similar motivation; note the above discussion with regard to claim 41.

Claims 20, 28, and 39 are similarly rejected. Note the above discussion with regard to claim 48.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Saitoh et al. (US 5,604,775) is cited as of interest because it discloses a digital phase locked loop having coarse and fine step size variable delay lines.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 703-306-9178 and Right Fax number is 703-746-3951. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

HAI L. NGUYEN
PATENT EXAMINER
December 7, 2002